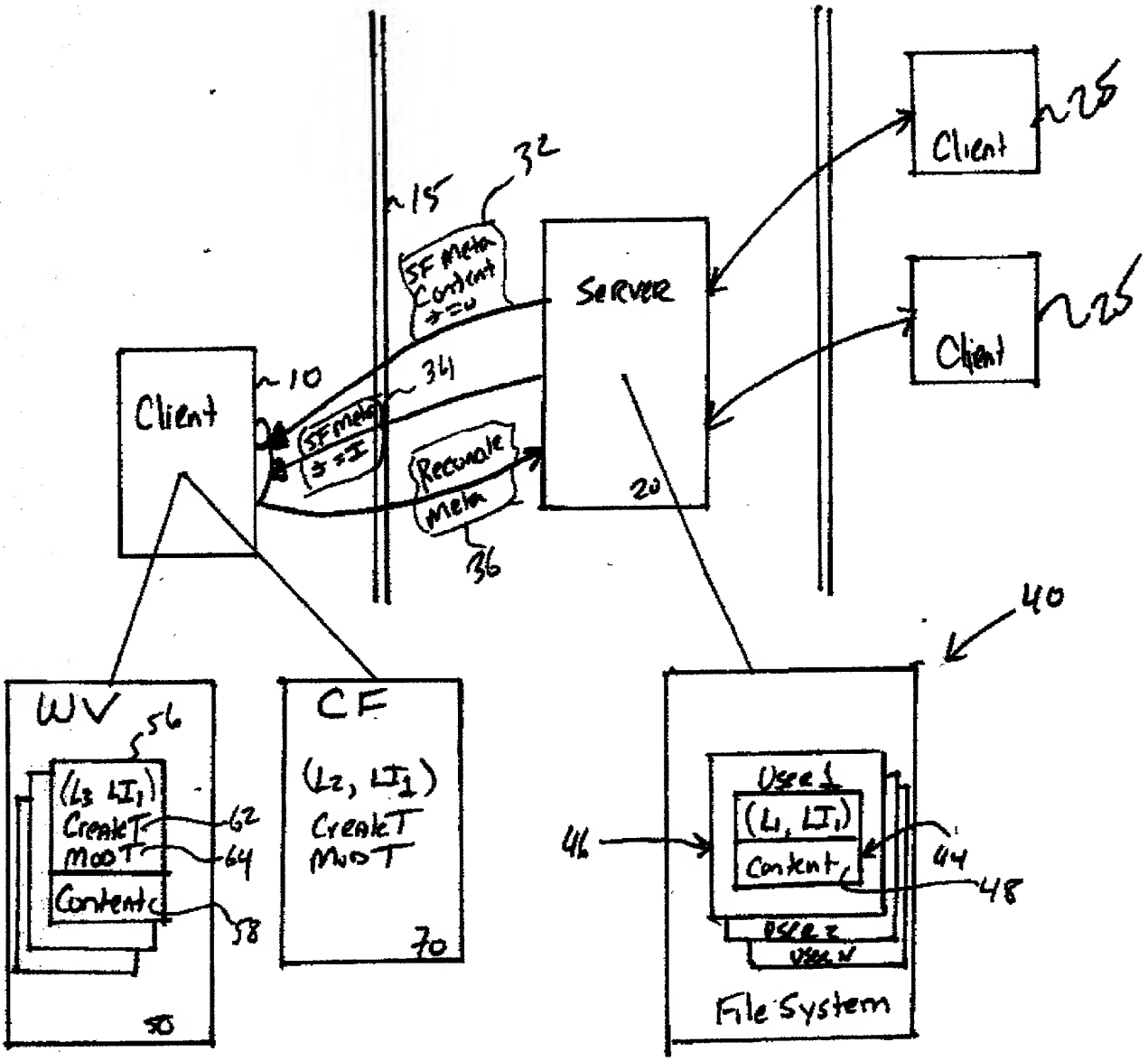
Client
25
Client
25
15
32
SF Meta Content
Server
Client
10
34
SF meta
Recvale Meta
20
36
40
WV
56
(L3 LI1)
CreakT
MooT
Content
62
64
58
50
CF
(L2, LI1)
CreakT
MooT
70
User 1
(L1, LI1)
Content
46
44
48
User 2
User N
File System

FIG. 1

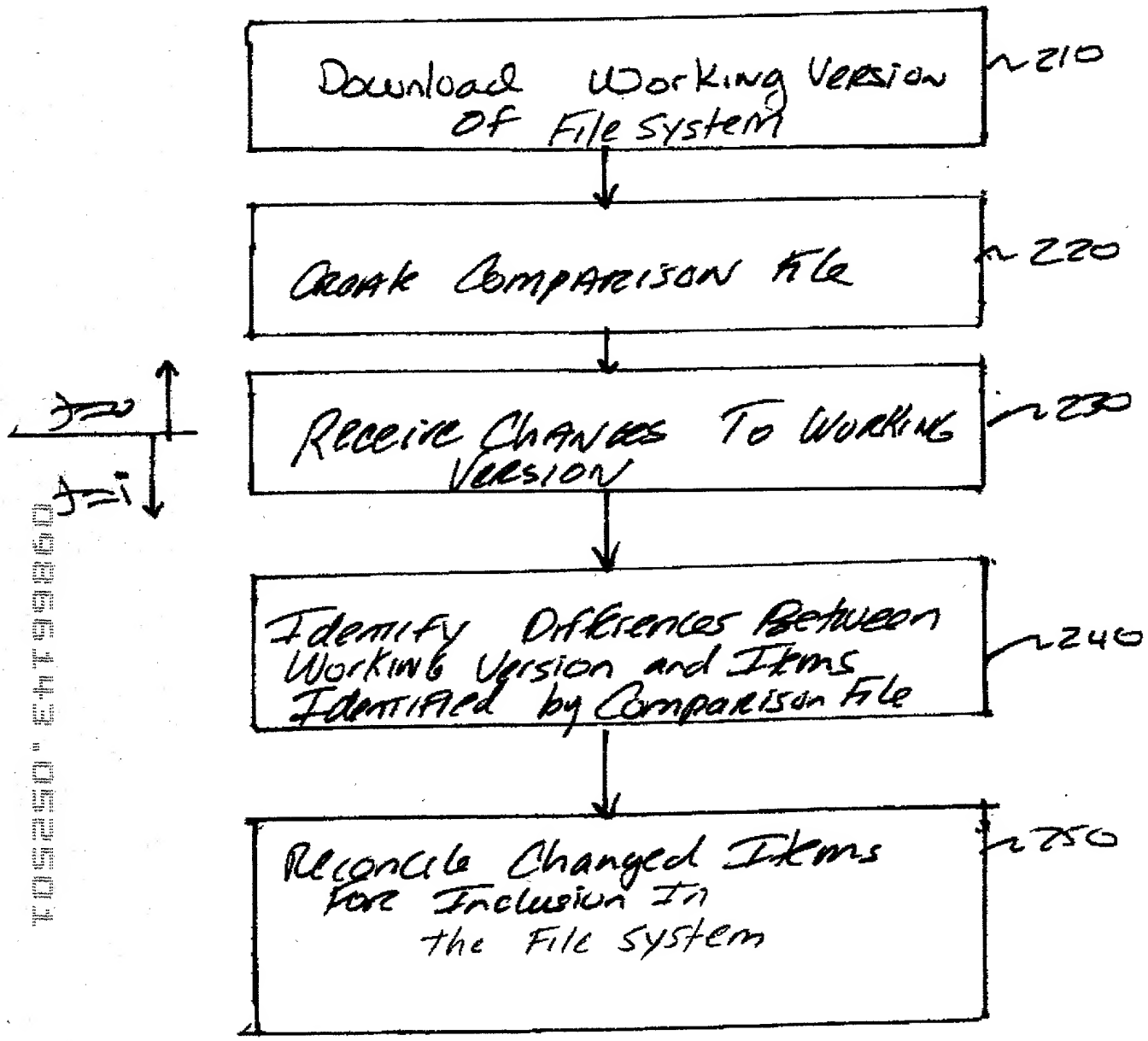
Download Working Version Of File System
210
Create Comparison File
220
Receive Changes To Working Version
230
j=n
j=i
Identify Differences Between Working Version and Items Identified by Comparison File
240
Reconcile Changed Items For Inclusion In the File System
250

FIG. 2

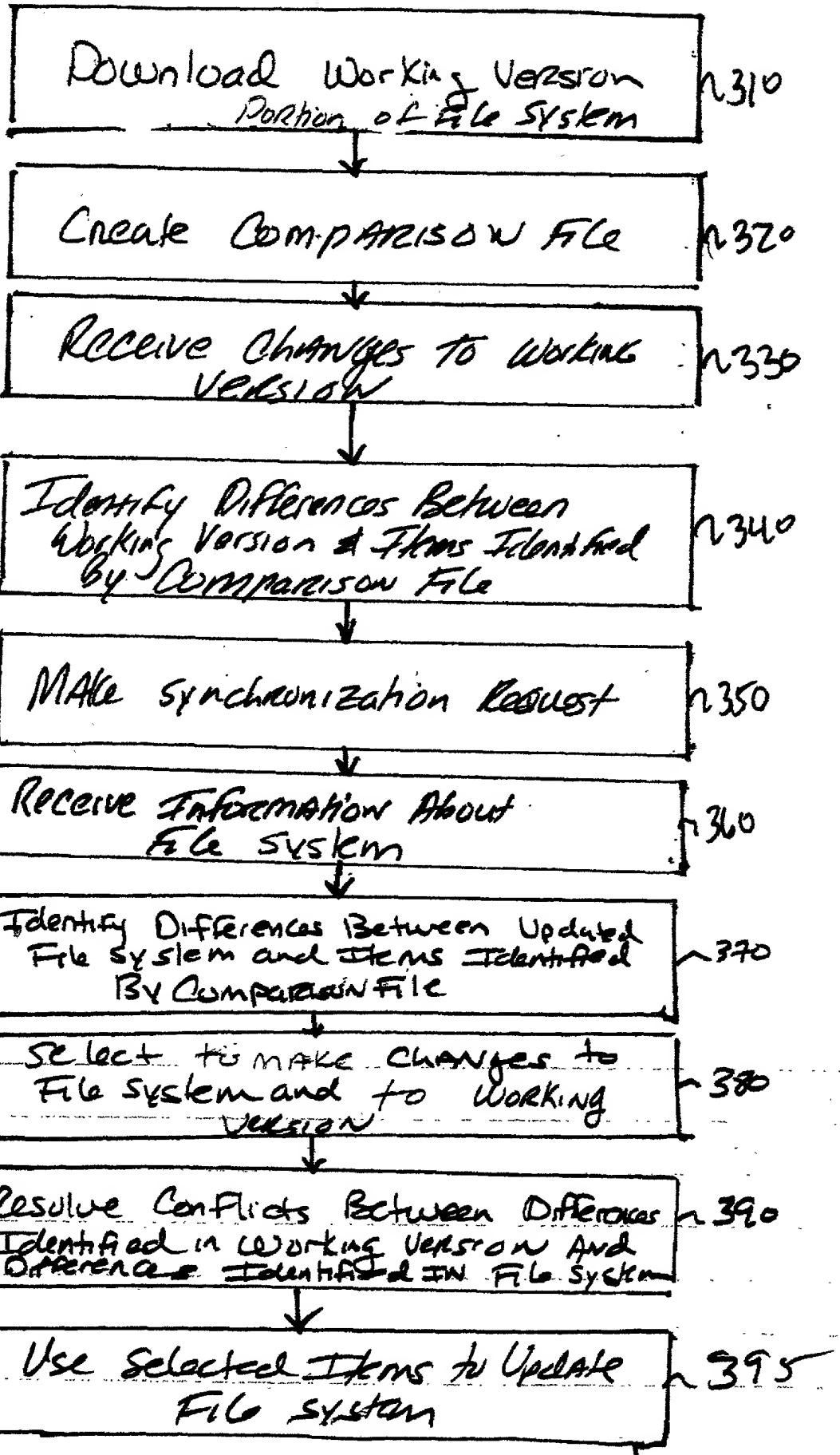
Download Working Version Portion of File System
310
Create Comparison File
320
Receive Changes to Working Version
330
Identify Differences Between Working Version & Items Identified By Comparison File
340
Make Synchronization Request
350
Receive Information About File System
360
Identify Differences Between Updated File System and Items Identified By Comparison File
370
Select to make Changes to File System and to Working Version
380
Resolve Conflicts Between Differences Identified in Working Version And Differences Identified IN File System
390
Use Selected Items to Update File System
395

FIG. 3

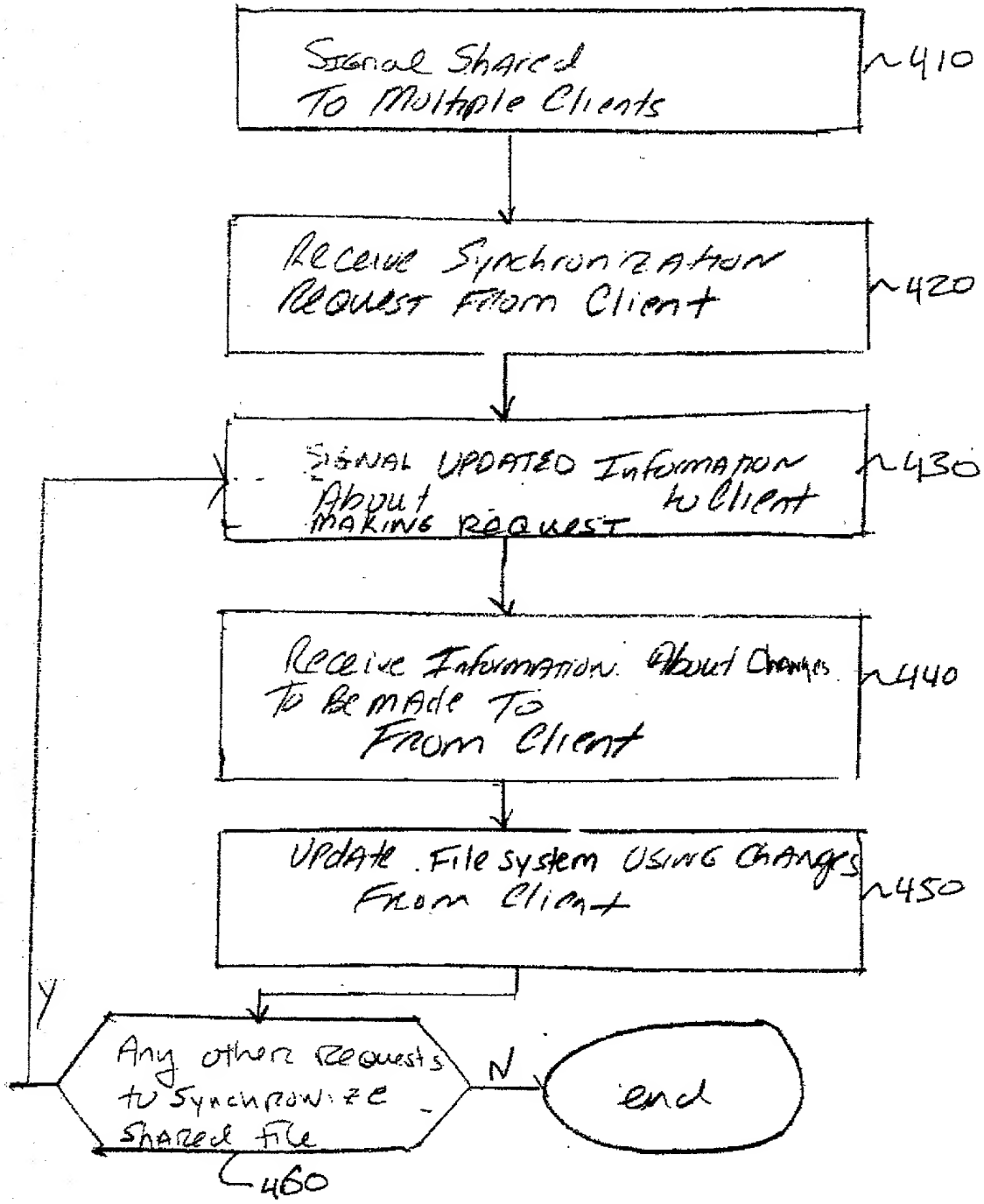
Signal Shared To Multiple Clients
410
Receive Synchronization Request From Client
420
Signal Updated Information About Making Request to Client
430
Receive Information About Changes To Be Made To From Client
440
Update File System Using Changes From Client
450
Any other requests to Synchronize Shared file
460
Y
N
end

FIG-4

Flow Process For Identifying Changed Items

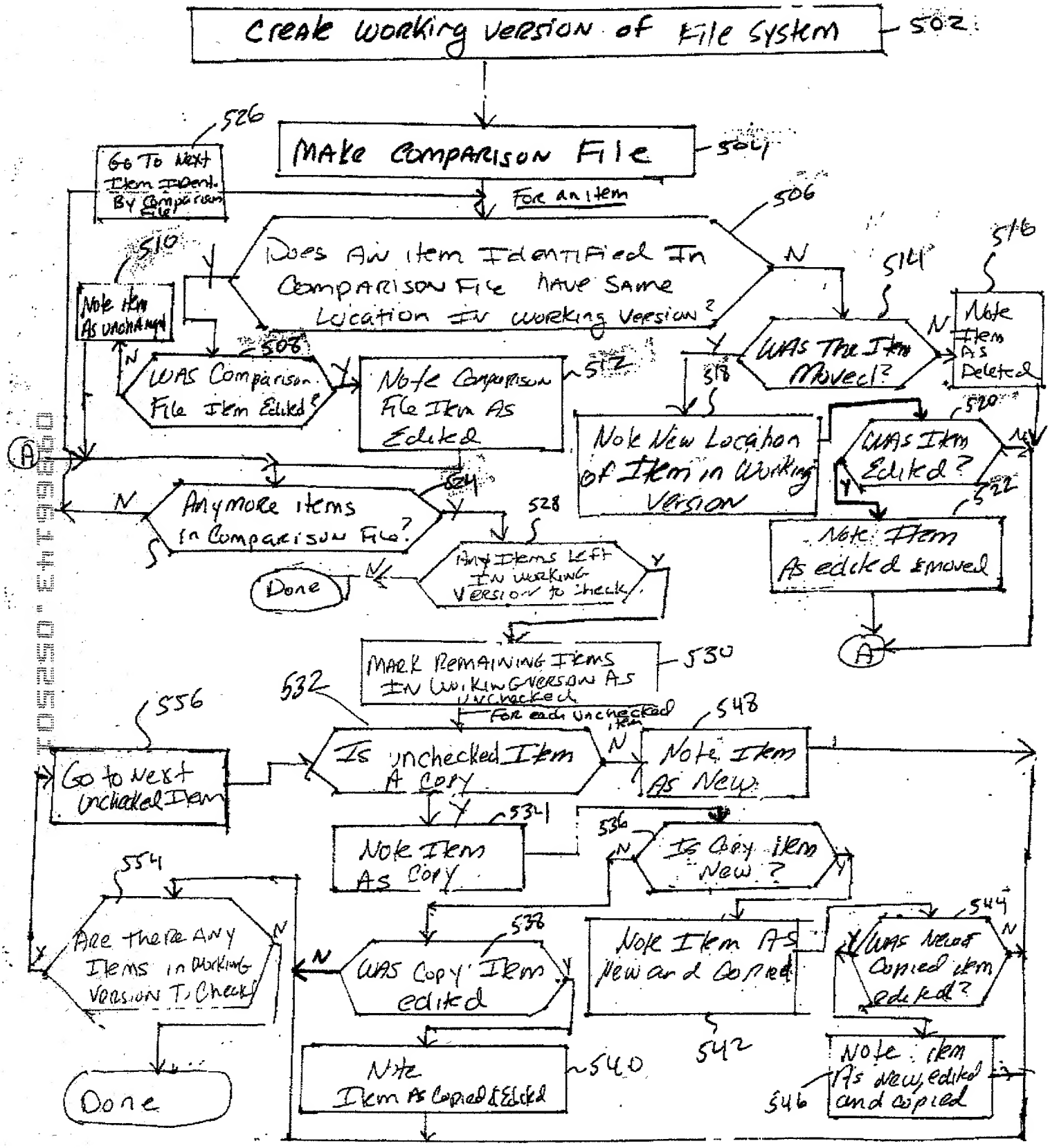

FIG. 5

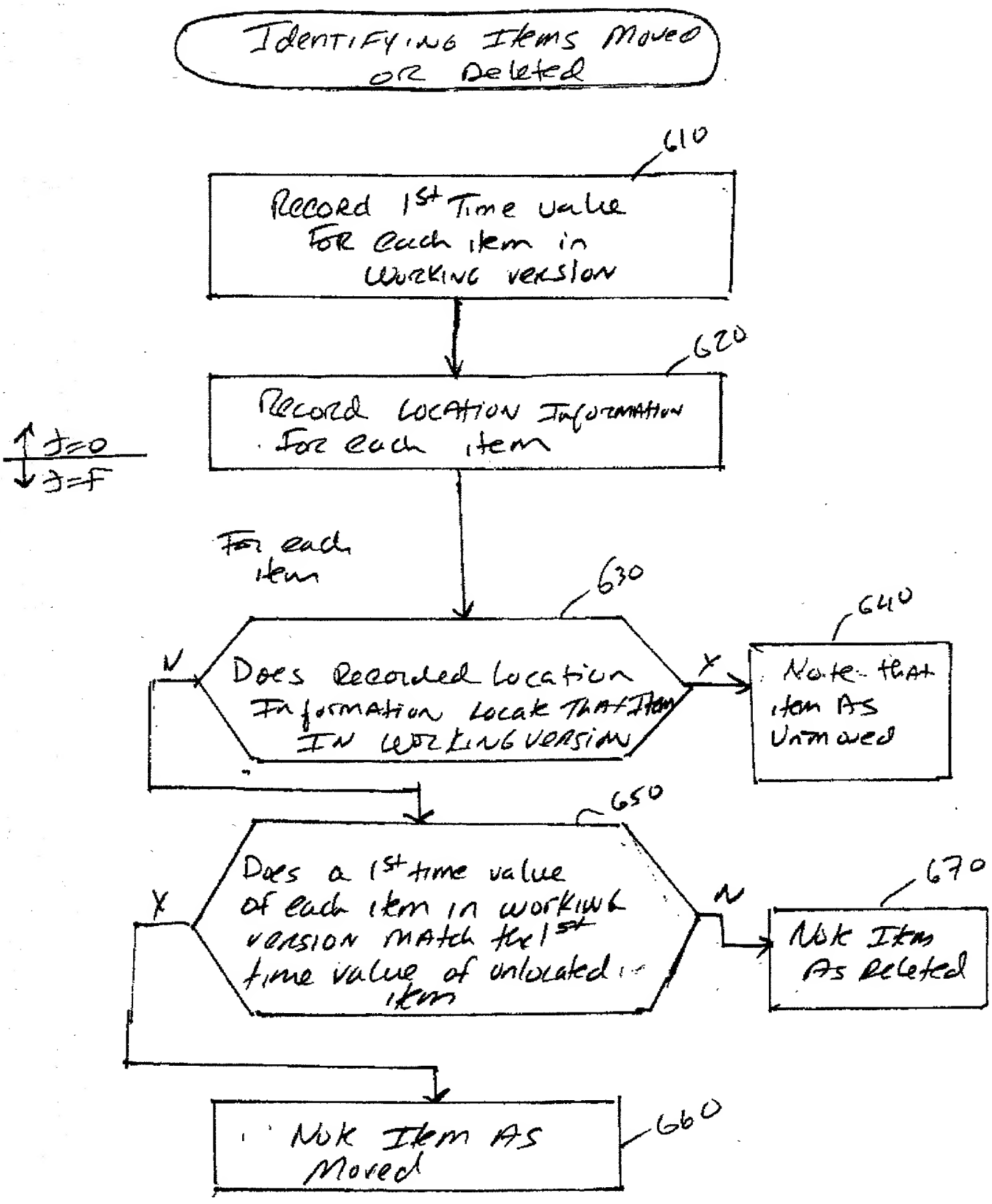
Identifying Items Moved or Deleted
610
Record 1st Time value For each item in working version
620
Record location Information For each item
J=0
J=F
For each item
630
Does Recorded location Information Locate That Item IN WORKING VERSION
N
Y
640
Note that item As Unmoved
650
Does a 1st time value of each item in working version match the 1st time value of unlocated item
Y
N
670
Mark Item As Deleted
Mark Item As Moved
660

FIG. 6

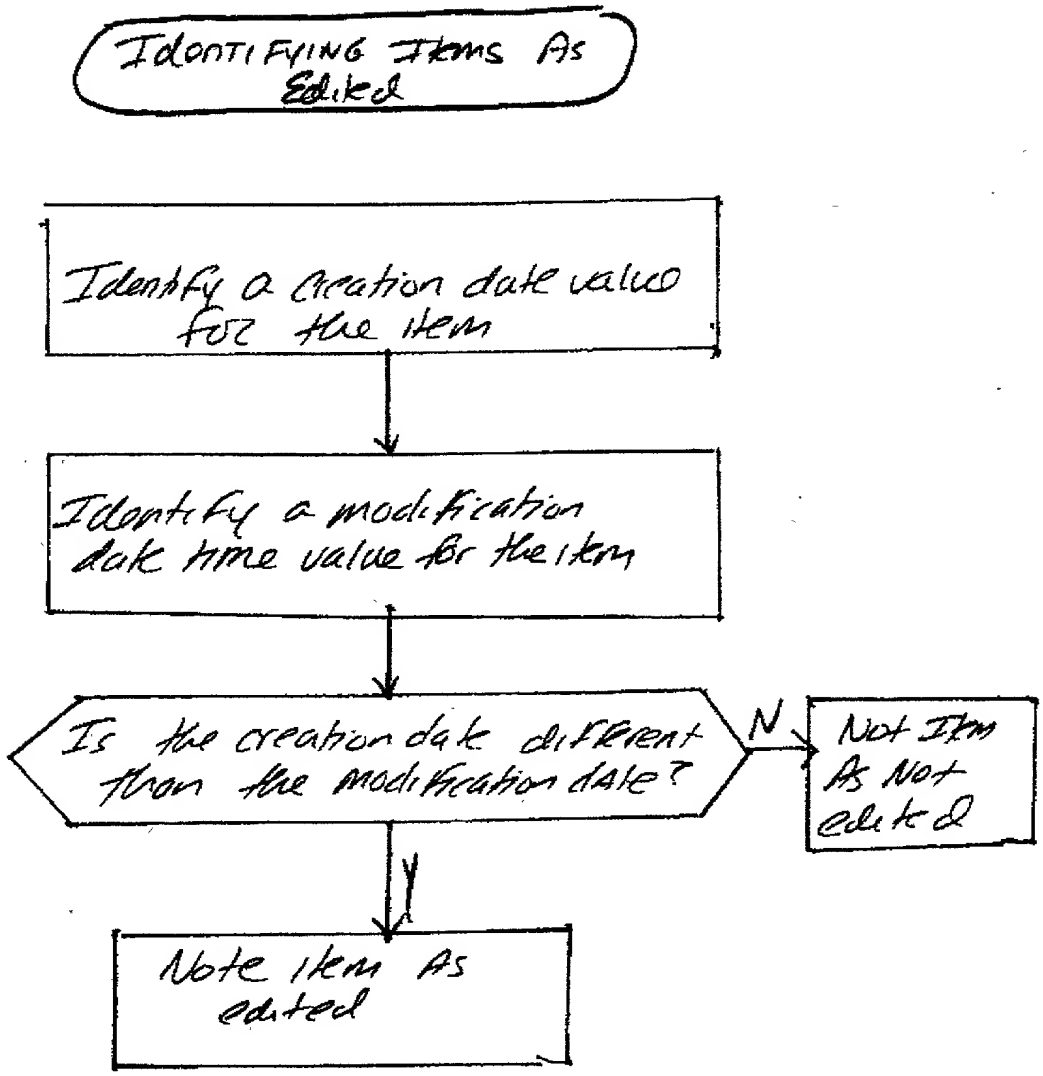
Identifying Items As Edited
Identify a creation date value for the item
Identify a modification date time value for the item
Is the creation date different from the modification date?
N
Not Item As Not edited
Y
Note item As edited

FIG. 7

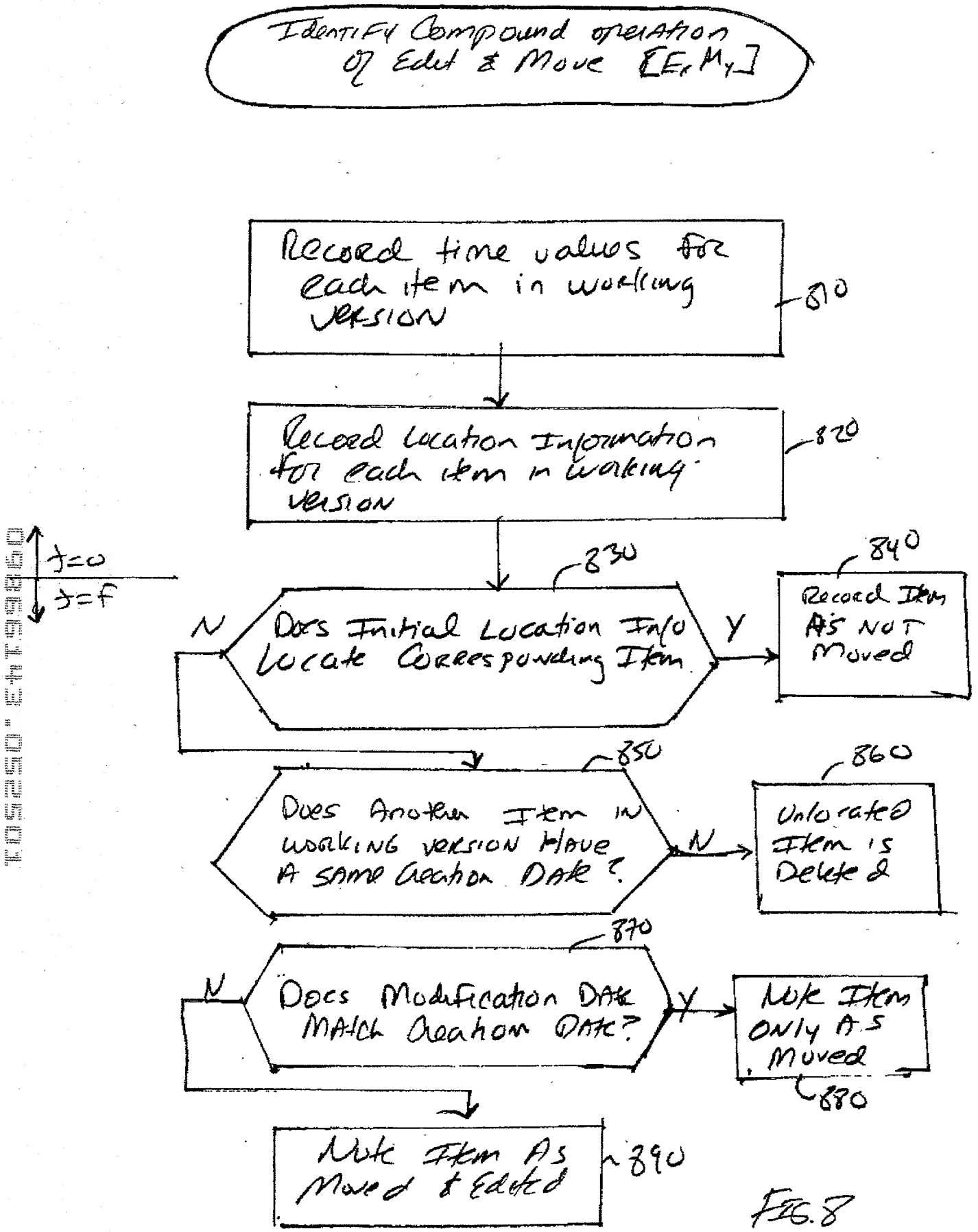
Identify Compound operation of Edit & Move [E, M_y]
Record time values for each item in working version
810
Record location information for each item in working version
820
j=0
j=f
830
Does Initial Location Info Locate Corresponding Item
N
Y
840
Record Item As NOT Moved
850
Does Another Item in working version Have A same Creation Date?
N
860
Unlocated Item is Deleted
870
Does Modification Date MATCH Creation Date?
N
Y
Mark Item ONLY AS Moved
880
Mark Item As Moved & Edited
890

FIG. 8

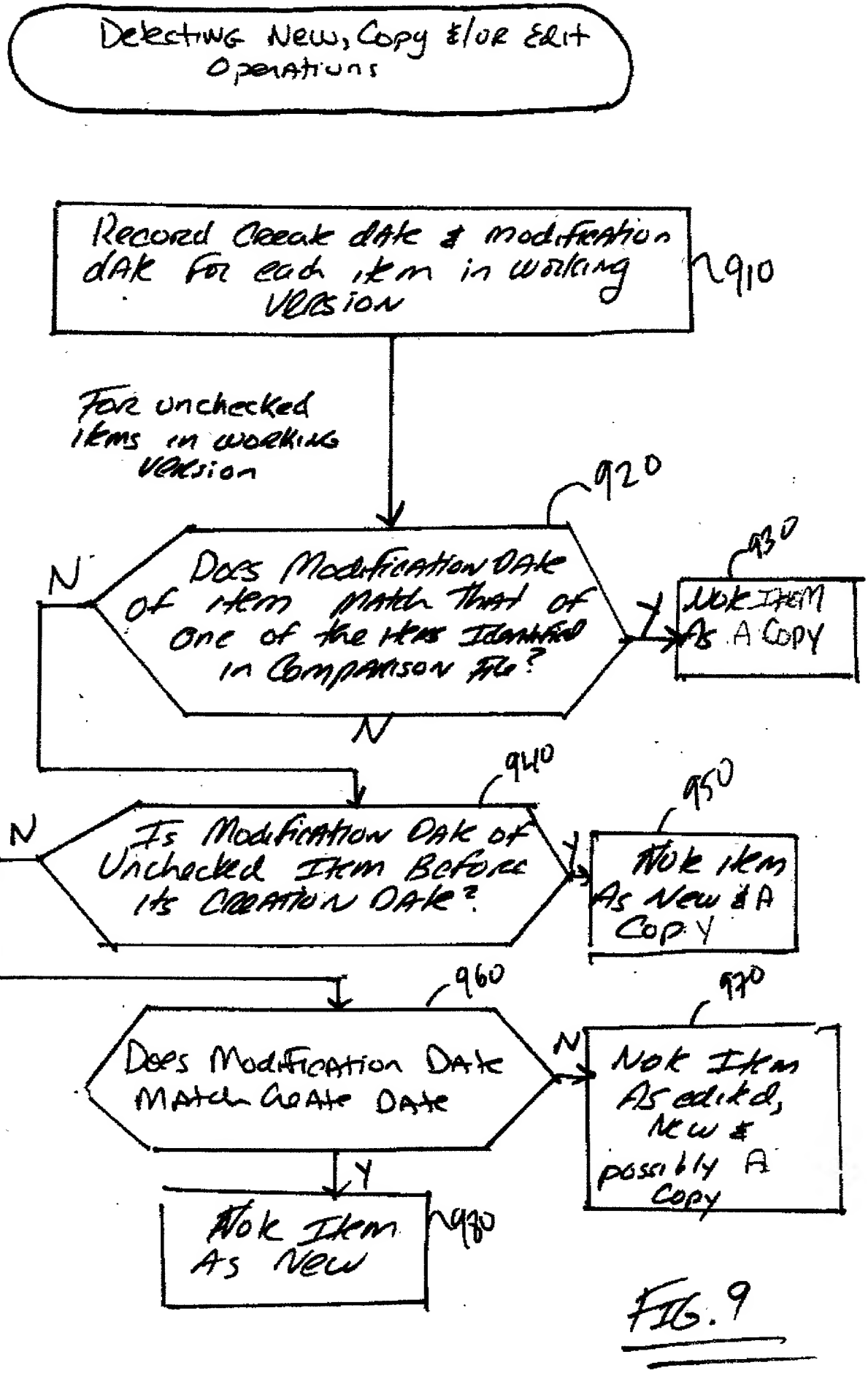
Detecting New, Copy &/or Edit Operations
Record Create date & modification date for each item in working version
910
For unchecked items in working version
920
Does Modification Date of item match that of one of the items identified in Comparison file?
N
Y
930
Mark Item As A Copy
940
Is Modification Date of Unchecked Item Before its Creation Date?
N
Y
950
Mark item As New & A Copy
960
Does Modification Date Match Create Date
N
Y
970
Mark Item As edited, New & possibly A Copy
980
Mark Item As New

FIG. 9

Computer A		Computer B	
File NAME	Action Required	File NAme	Action Required
A_1	$_xM_y$	B_1	$_aC_b$
A_2	E	B_2	E
⋮		⋮	
A_n	$(N)_xC_y$	B_n	D

User Interface

FIG. 10

TO5250" Eh799860
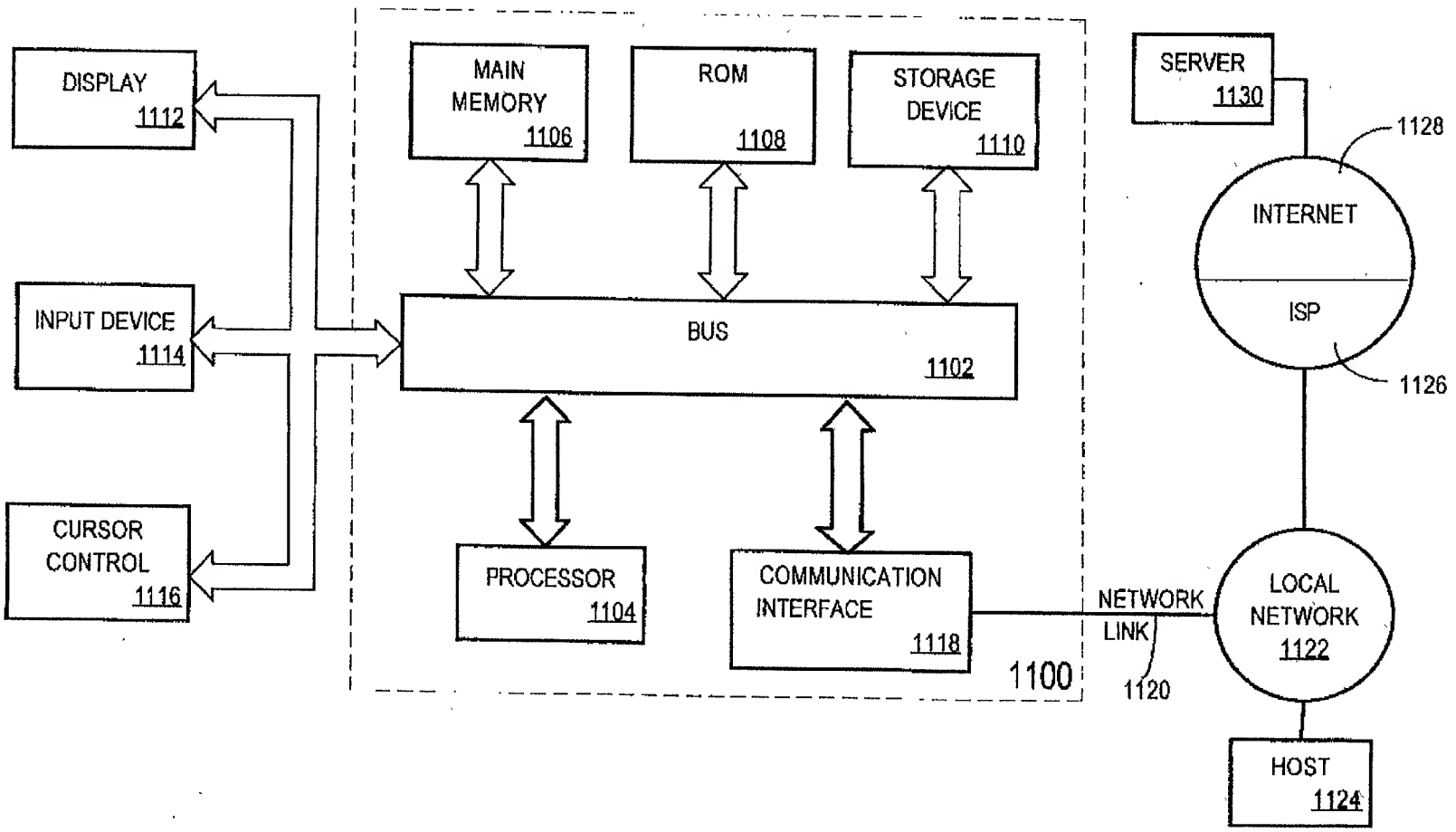
FIG. 11